NOAA's National Ocean Service

ROUNDTABLES

SUSTAINABLE USE

America's economy depends on a healthy ocean environment. Our oceans support a variety of sustainable economic uses including tourism, recreational activities, and marine transportation. Over the next five years, NOAA's National Ocean Service (NOS) will combine its core capabilities with new technologies to guide the environmentally sound use of ocean and coastal ecosystems.

Marine Recreation

NOS promotes sustainable marine recreation by providing a variety of products and services, and managing protected areas such as national marine sanctuaries. Recreational boaters and fishermen rely on NOS for nautical charts and accurate tide levels. Millions of people visit the 13 U.S. national marine sanctuaries each year to dive, fish, and enjoy the scenery. The nationwide network of estuarine research reserves provide opportunities for wildlife viewing, paddling, and other outdoor pursuits. Swimming, boating, surfing, whale watching and other water-based activities are favorite pastimes of countless people who live on and visit our coasts.

Marine recreation plays an important role in the nation's economy. Coastal tourism contributed $1.4 trillion to the national economy in 2001, making it one of the largest industries in the United States (National Academy of Sciences, 2002). Twelve percent of total U.S. employment (approximately 17 million jobs) depends on coastal tourism (National Academy of Sciences, 2002). More than 89 million people visit and recreate along the U.S. coast each year. NOS works with federal, state, and local partners to educate the public about the marine environment.

Cruise Ships

Cruise ship passenger volume has increased, especially in domestic and Caribbean waters, since 2001. Public concern over the environmental impacts of the cruise ship industry is also on the rise. Port authorities, resource trustees and nongovernmental organizations (NGOs) are involved in a growing number of media-monitored meetings and debates. Issues receiving public and NGO scrutiny include wastewater discharges, air emissions, ballast water discharges and fuel transfer. States and the federal government are considering legislation to ban wastewater discharges and air emissions in sensitive regions and/or to require so-called advanced treatment technologies. NOS is involved in several of these issues. National marine sanctuaries are under pressure to take action on potential cruise ship impacts, and NOS staff and the State of Alaska collaborated to provide unbiased data on cruise ship wastewater discharges. NOS can help its partners develop policies based on sound science and the assessment of trade-offs. NOS's capabilities include facilitation, modeling, risk assessment, research and monitoring, and the production of guides or "job aids" for decision-making.

Marine Transportation

The marine transportation system (MTS) consists of shipping lanes, waterways, coastal and inland ports, and intermodal landside connections that allow people and goods to move along the water. Every year, this system moves $10 trillion of cargo and 95% of U.S. international trade, contributing $724 billion to the gross domestic product, and supporting 13 million jobs. According to a recently released National Research Council report, the U.S. Department of Transportation (DOT) should take the lead in assessing the performance of and improving the nation's entire marine transportation system. NOAA can work within the recommendations of this report, and the results of any DOT actions, to better apply its tools and programs to the marine transportation

field. NOAA's marine transportation services program provides products, information, tools, and services to ensure the safe and efficient flow of marine traffic. NOS provides extensive navigation services in support of the MTS, as well products that foster the development of landside port infrastructure. Among these are the assessment and reuse of dredged material (e.g., watershed GIS projects, portfields partnerships to reuse brownfields as port infrastructure, best management practices for beneficial reuse of sediment in restoration, and research on the effects of dredging). NOS also provides planning and response services to avoid or mitigate the environmental effects of oil and chemical spills.

Wind Energy

The development of offshore wind-harvesting facilities is under consideration in several coastal areas, including the waters off Massachusetts and Virginia. These "wind farms" have potential impacts on migratory birds and other living marine resources. NOS is working with coastal states to determine their role in reviewing applications for such facilities. NOS is currently discussing this issue with other federal agencies, states and stakeholder groups as a member of the National Wind Coordinating Committee sponsored by the U.S. Department of Energy.

Human Uses of Estuaries

Estuaries support a variety of human uses, including commercial and recreational fisheries, marine transportation, and receiving waters for chemical and thermal wastes. Balancing these uses is critical to sustainable use, and the degree to which estuaries can withstand such uses is one measure of ecosystem health. NOS, in coordination with federal and state agencies, has begun to assess the health of estuaries based on this approach.

Coastal Zone Management

Under the Coastal Zone Management Act (CZMA), NOS provides financial and technical assistance to coastal states for better management of ocean resources. The Massachusetts CZM Program ocean management initiative strives to manage state waters more proactively; improve management in nearby federal waters; and strengthen administrative, regulatory, and statutory policies. The Louisiana CZM Program produced a map and maintains a database of oil and gas pipelines in the state's offshore waters. Oil and gas companies and contractors, government agencies, oil spill response teams, and industries such as shipping and fishing benefit from knowing where these pipelines are situated.

The CZMA also contains a "federal consistency" provision to ensure that federal activities are undertaken in a manner consistent with a state's coastal management laws and regulations. Ocean activities subject to these provisions include offshore oil and gas exploration and development, wind and other offshore energy facilities, and deployment of coastal and transoceanic cables and pipelines. NOS is currently evaluating public comments on a proposed rule to revise certain sections of these regulations.

Discussion Questions

- *How can NOS better support states' ocean management efforts (e.g., products, applied research, mediation services)?*
- *What role should NOS play in reviewing and/or approving plans for offshore energy exploration and development?*
- *How can NOS enhance its partnerships and working relationships stakeholders to manage ocean and coastal resources?*
- *What types of tools, services, and products should NOS offer its constituents to improve their ability to manage resources or conduct business?*
- *Would the Human Uses of Estuaries-type analysis/assessment be useful in your estuarine/coastal area? How can this approach be improved?*